DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018267 Address: 333 Burma Road **Date Inspected:** 03-Nov-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Geng Wei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

This QA Inspector randomly observed the following work in progress.

BAY #14

OBG 14WEST

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045270 performing the Submerged Arc Welding process on weld 007 located at PCMK SEG3020AY. ABF QA Mr. Shao Jian Yuan was monitoring this welding operation. The welding variables recorded by QA appeared to comply with WPS-B-T-2221-B-12c-s-2

OBG 13EAST

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044774 performing the Flux Cored Arc Welding process on weld 038 located at PCMK SEG3007F. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u5-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 20009 performing the Flux Cored Arc Welding process on weld 046 located at PCMK SEG3007G. ZPMC QC Mr. Wang Xu was monitoring this

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welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u5-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068920 performing the Flux Cored Arc Welding process on weld 047 located at PCMK SEG3007F. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u5-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068859 performing the Flux Cored Arc Welding process on weld 401 located at PCMK SEG3011E. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067656 performing the Shielded Metal Arc Welding process on weld 401 located at PCMK SEG3011G. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067993 performing the Flux Cored Arc Welding process on weld 150 located at PCMK SEG3011H. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044824 performing the Shielded Metal Arc Welding process on weld 015 located at PCMK VP3008-001. ZPMC QC Mr. Zhang Lin was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair. Critical report identified as B-CWR2122.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067601 performing the Shielded Metal Arc Welding process on weld 016 located at PCMK VP3008-001. ZPMC QC Mr. Zhang Lin was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair. Critical report identified as B-CWR2123.

This Quality Assurance (QA) Inspector observed ZPMC personnel performing ultrasonic testing on the weld SEG3019AY-003.

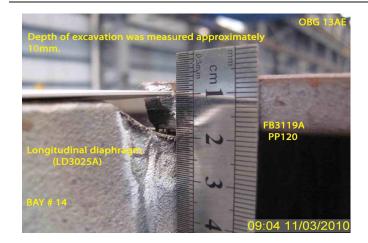
OBG 13AE

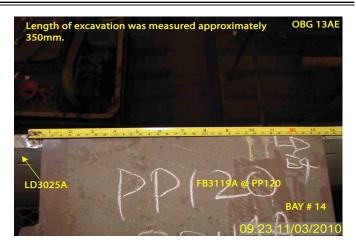
During the Quality Assurance (QA) random in-process observations of the fabrication of OBG segment, this Caltrans QA Inspector observed, ZPMC personnel cut out the upper leading edge of the longitudinal diaphragm LD3025 web at a total of five (5) locations to facilitate fit up at the floor beam intersections, the Floor beams in way of LD3025A at E4 are identified as FB3113A, FB3123A, FB3110A and FB3126A and FB3116A. Maximum dimension of the longitudinal diaphragm web plate removal was 10mm x 350mm. For more detail see attached photos.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer